

FIG.1

2/29

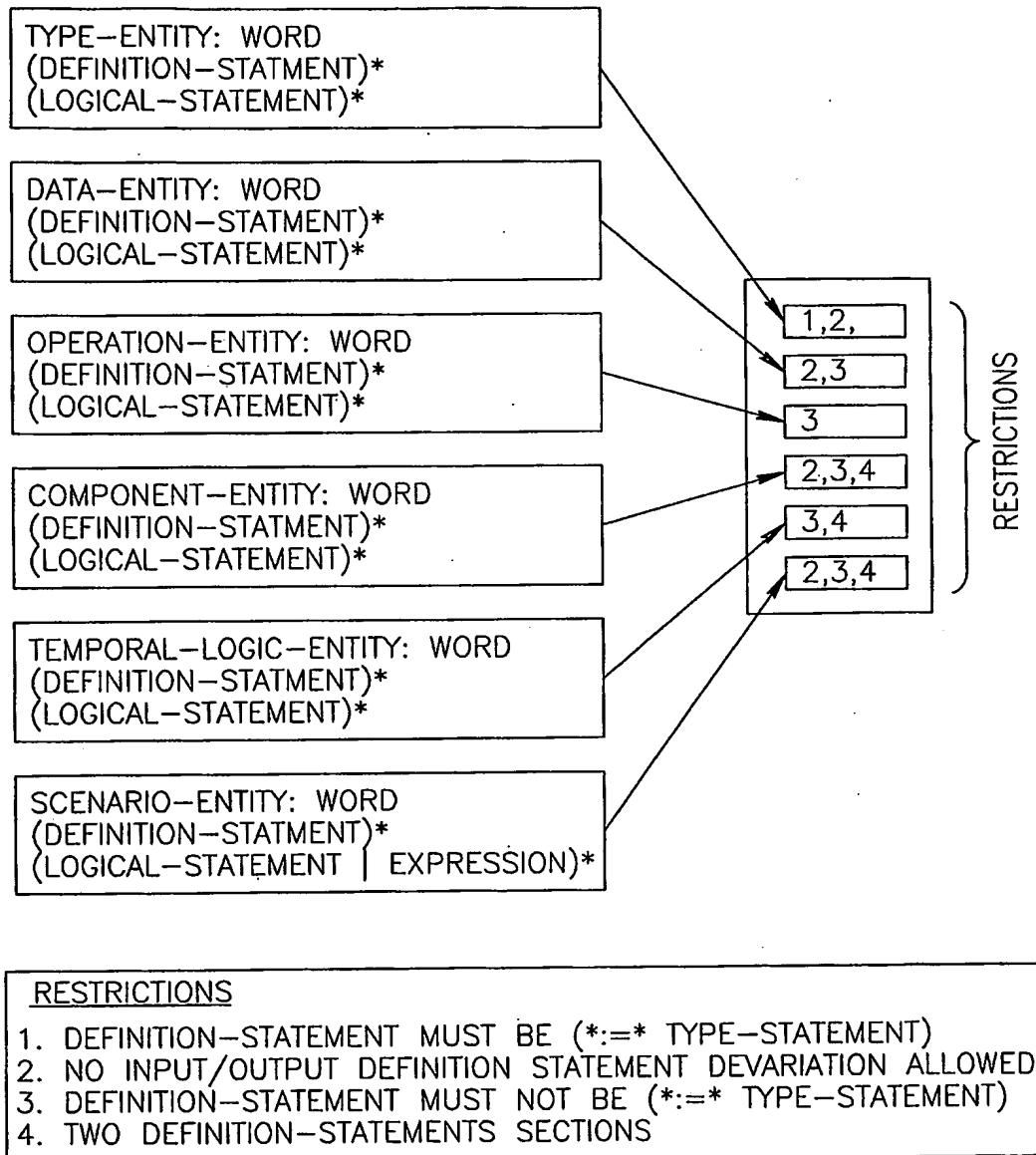


FIG.2

SUBSTITUTE SHEET (RULE 26)

4/29

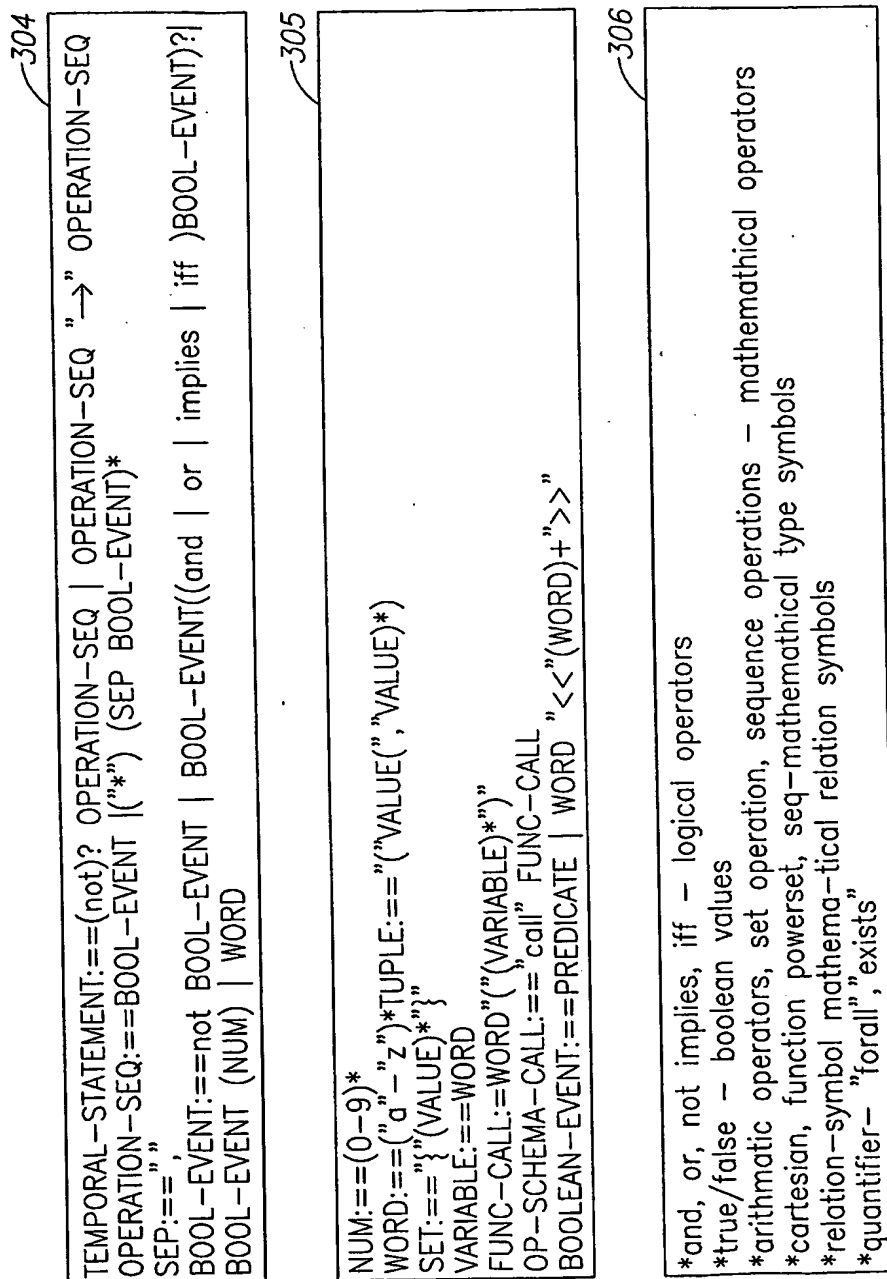


FIG.3

5/29

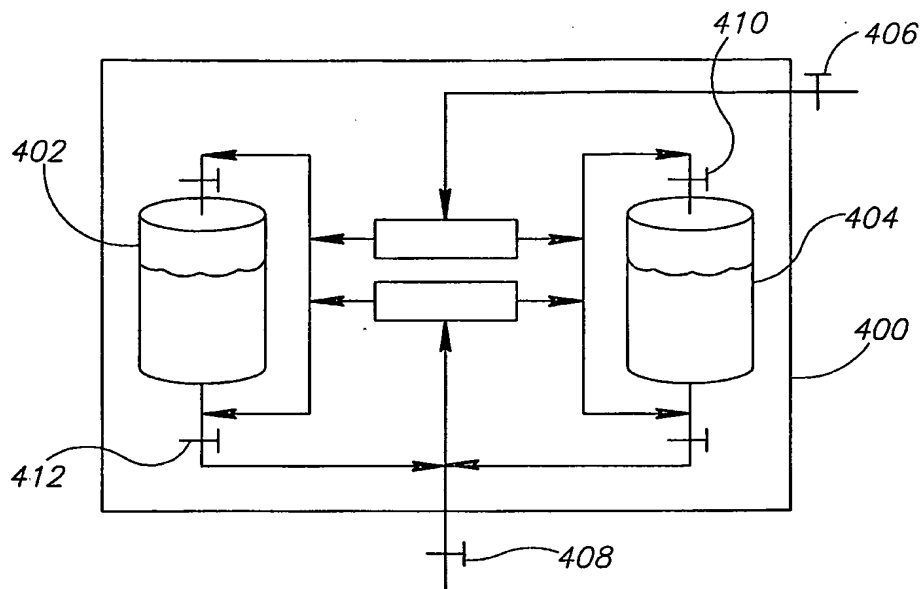


FIG.4

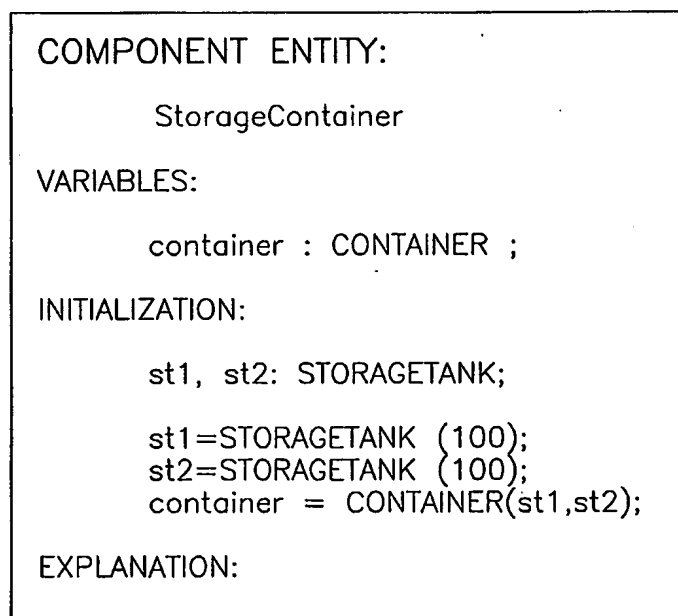


FIG.5

6/29**DATA ENTITY:**

Container

VARIABLES:

st1, st2: STORAGETANK;

INVARIANTS:**EXPLANATION:****FIG.6****DATA ENTITY:**

StorageTank

VARIABLES:

contents : naturals;

capacity : naturals;

INVARIANTS:capacity \geq contents**EXPLANATION:****FIG.7****TYPE ENTITY:**

SpecificationTypes

TYPE DEFINITIONS:

naturals : integers;

IndicationMessage:= {SUCCESS, FAIL}

RESTRICTIONS: $\forall n:\text{naturals} \bullet n \geq 0;$ **EXPLANATION:****FIG.8**

7/29

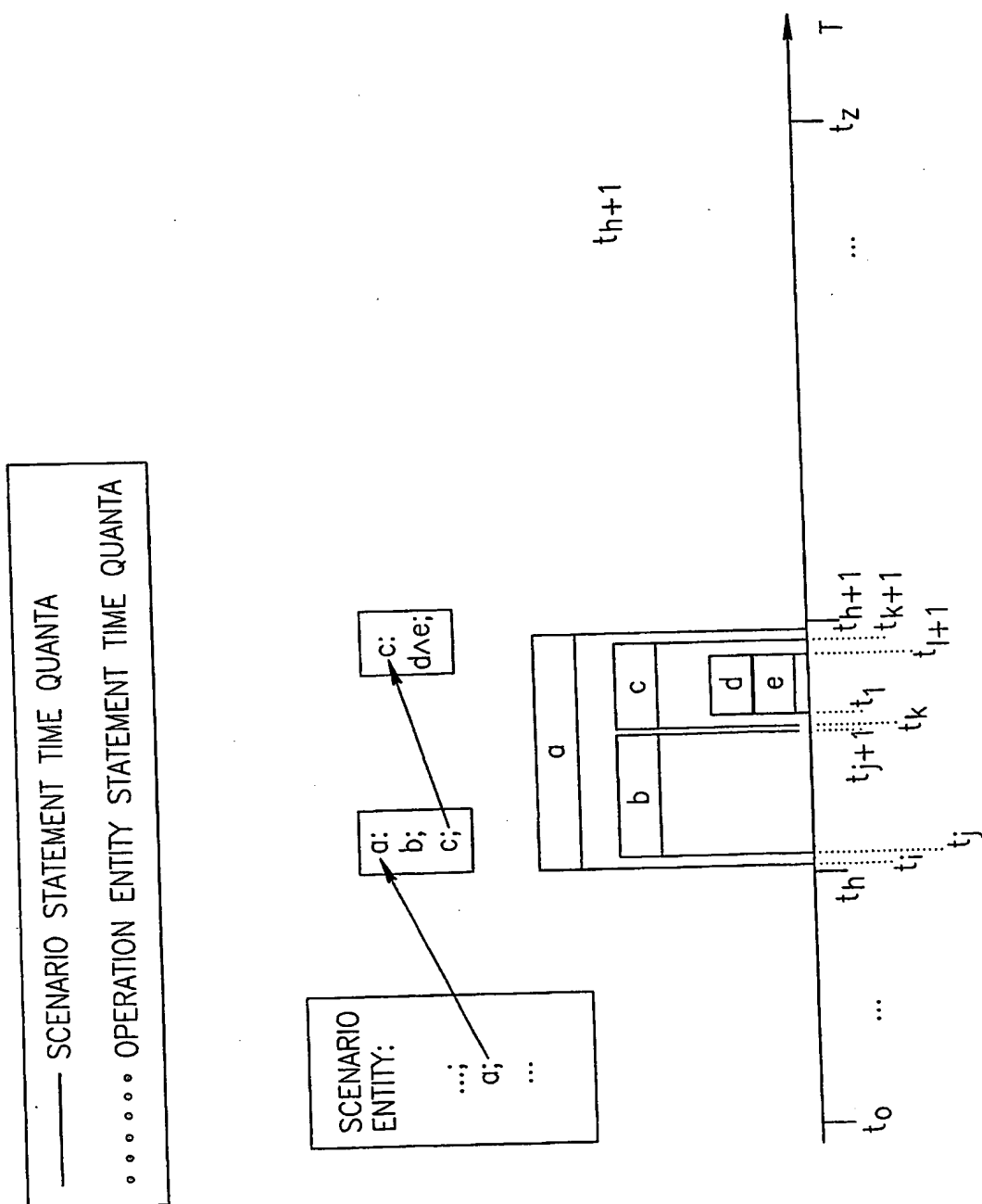


FIG.9

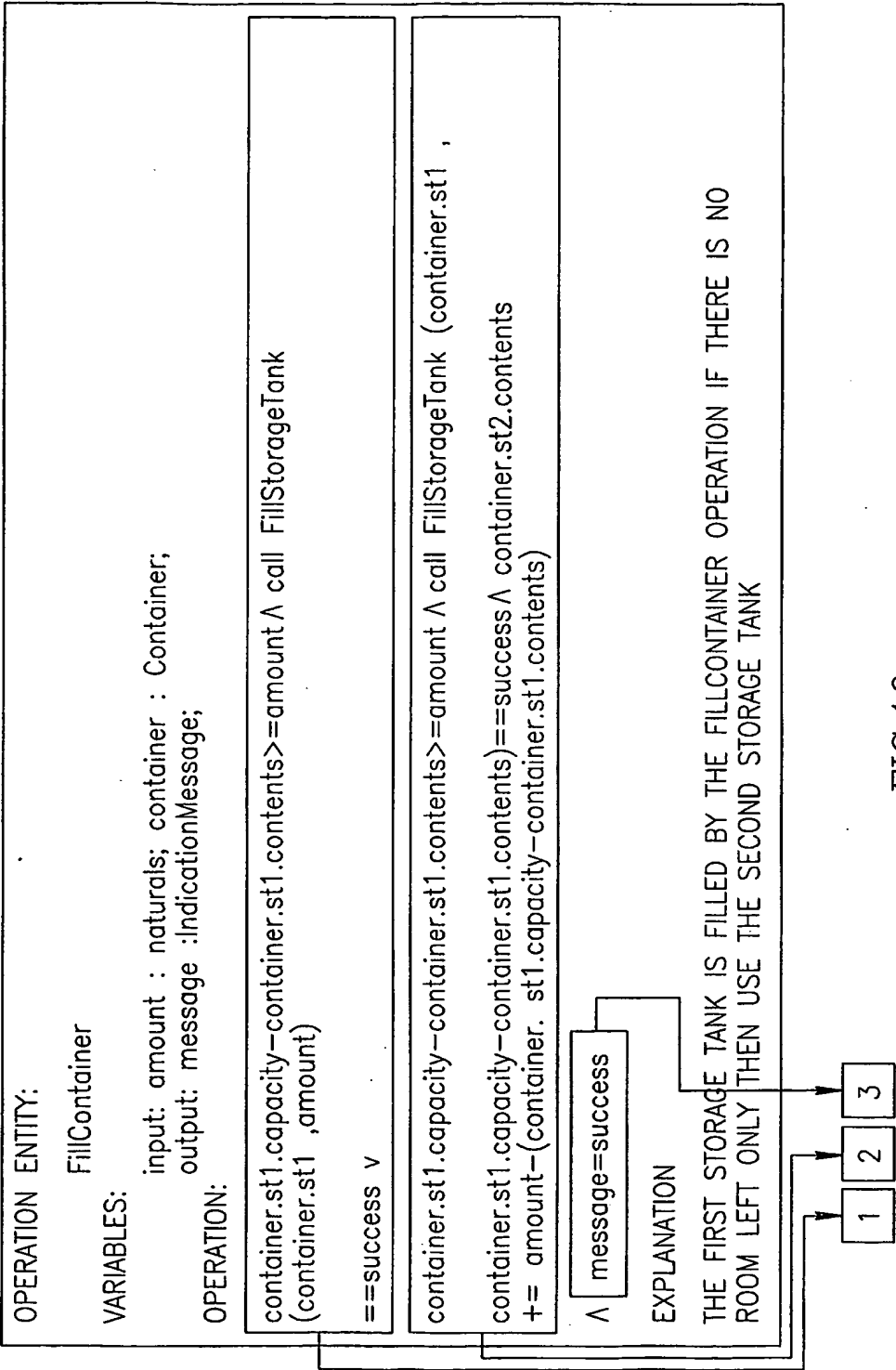


FIG.10

9/29

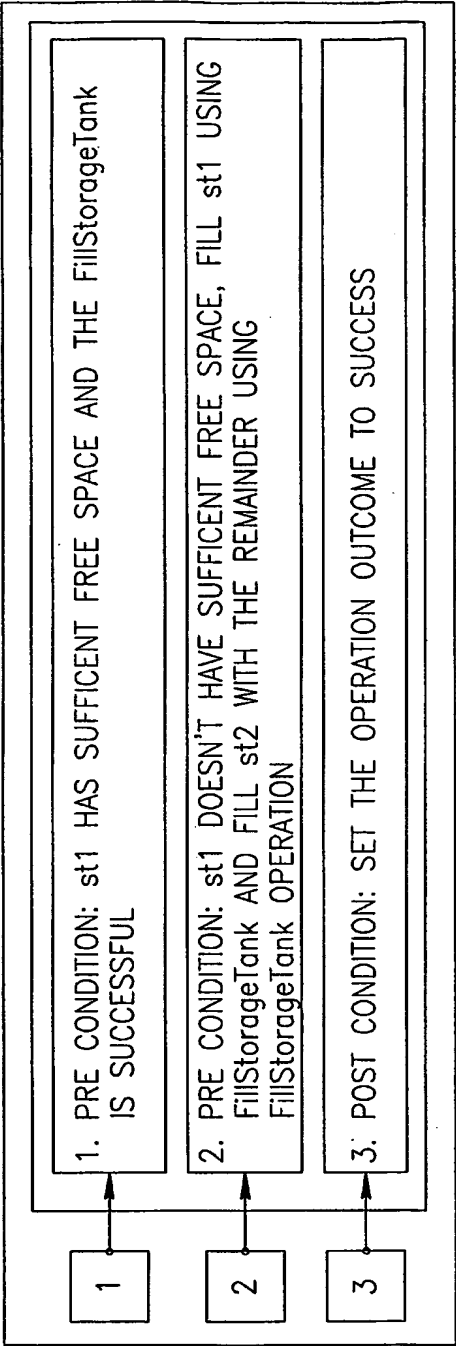


FIG.10A

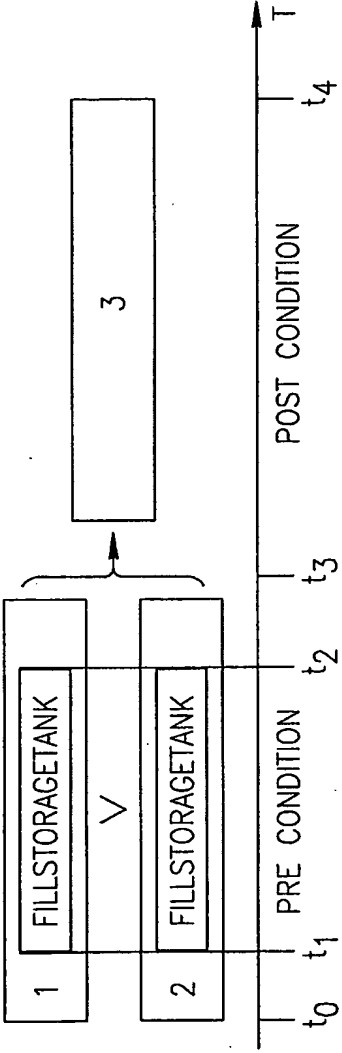


FIG.10B

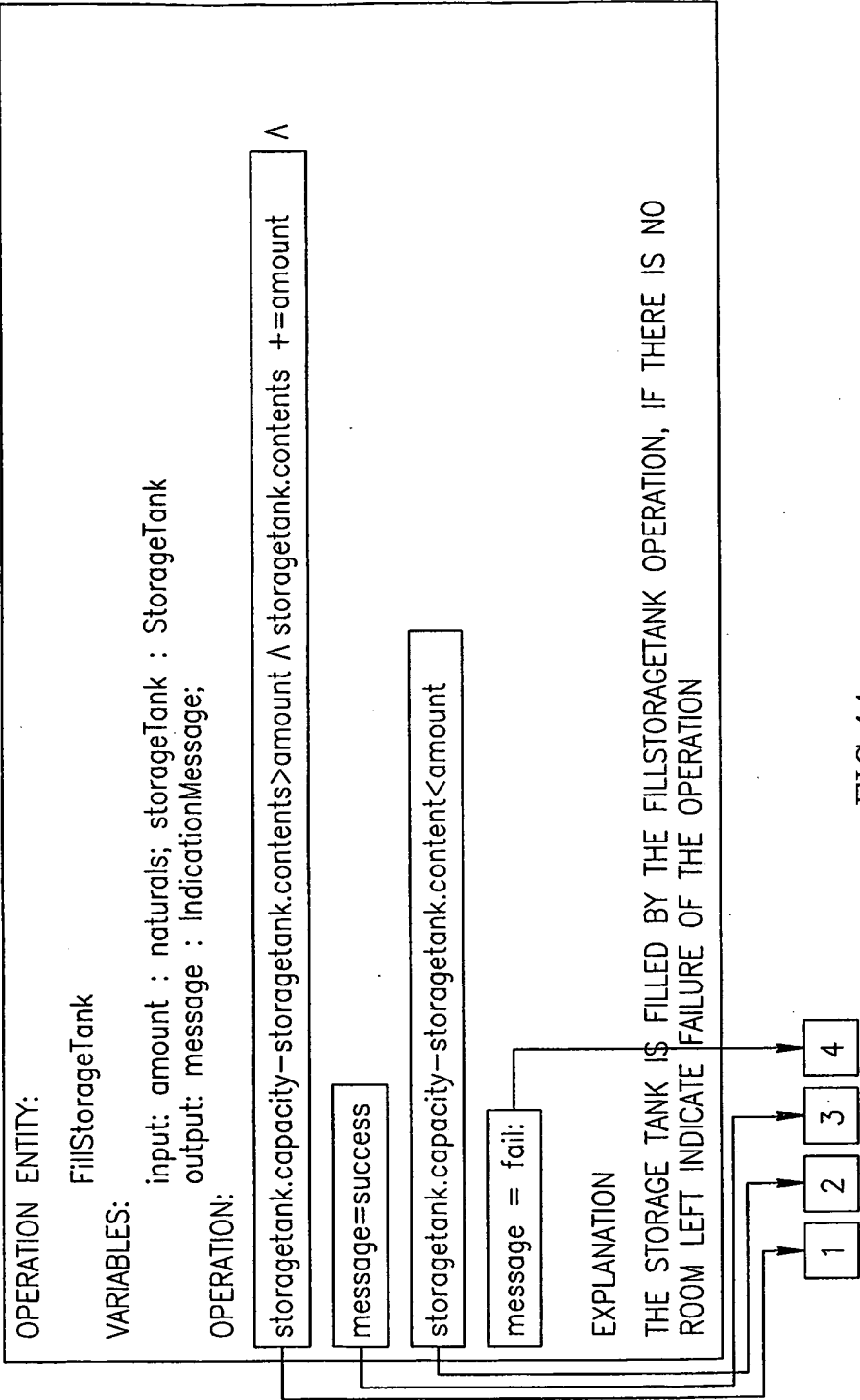


FIG.11

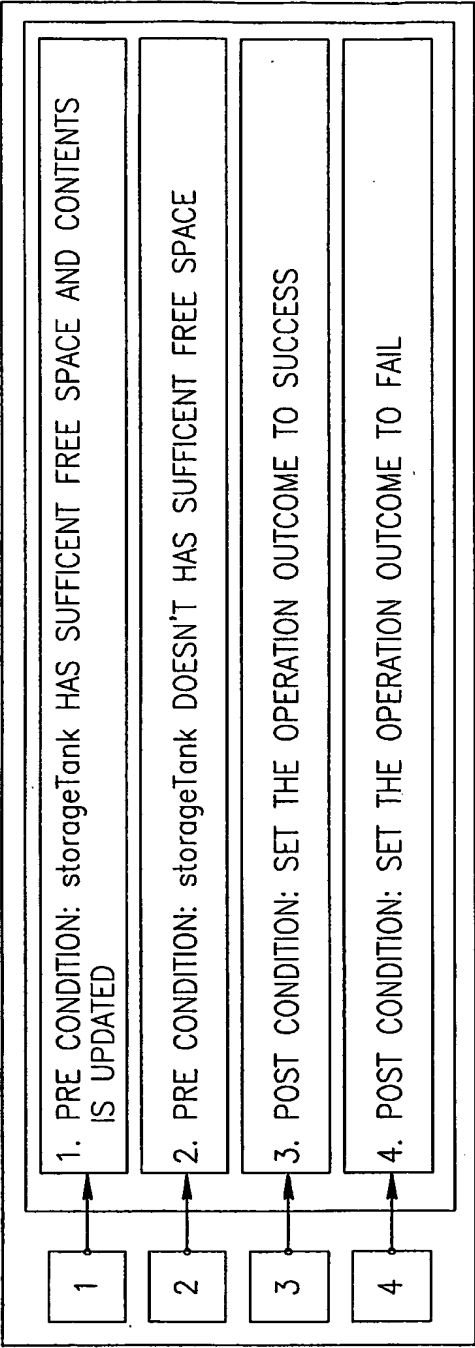


FIG.11A

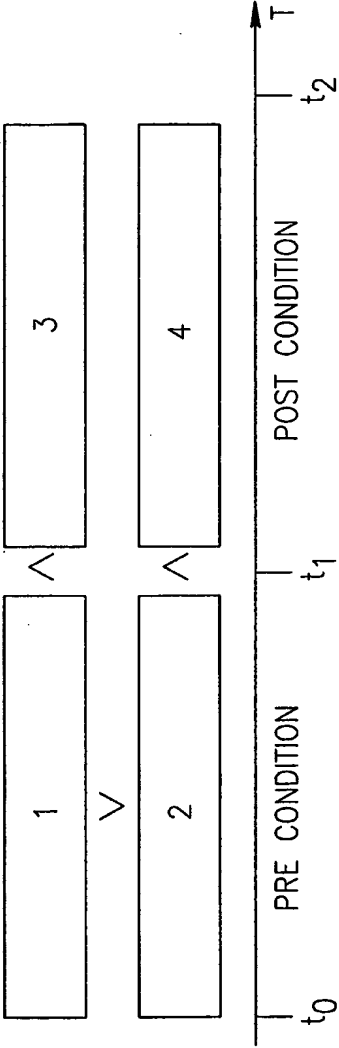


FIG.11B

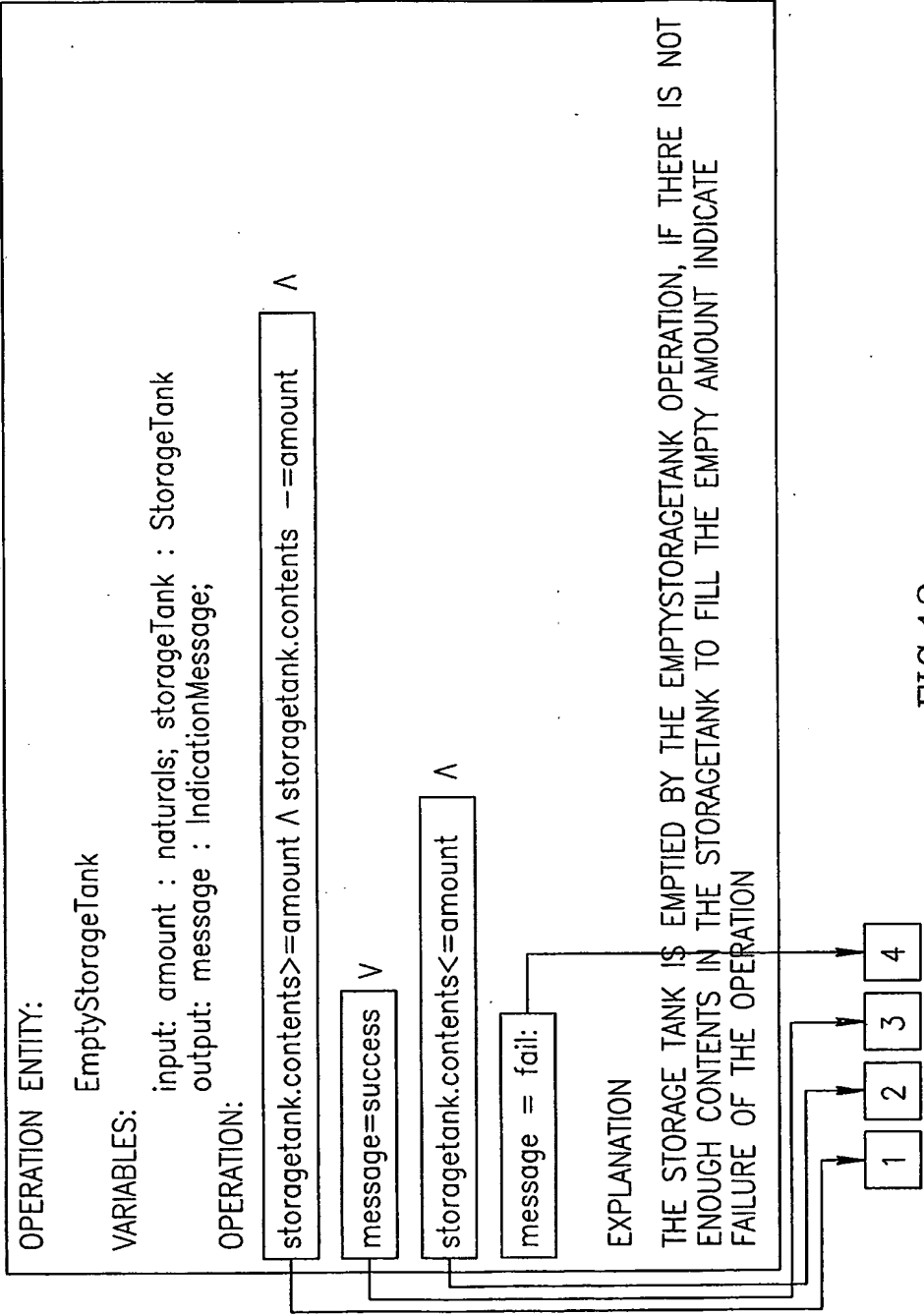


FIG.12

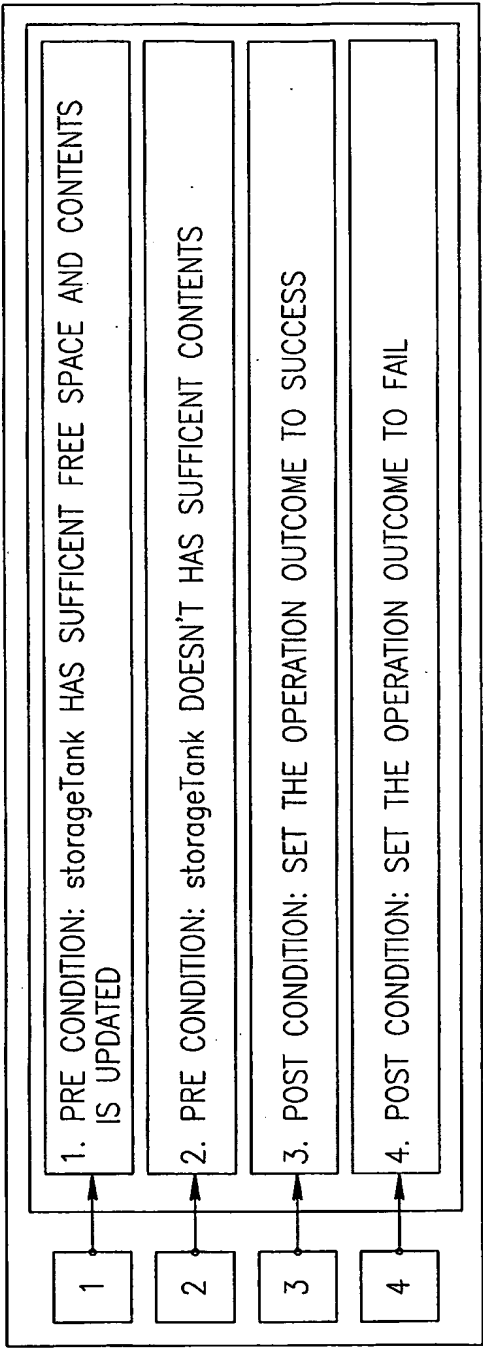


FIG.12A

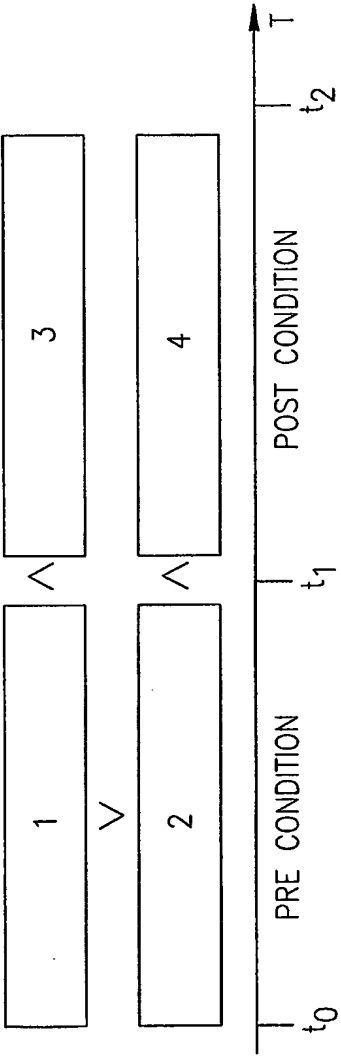


FIG.12B

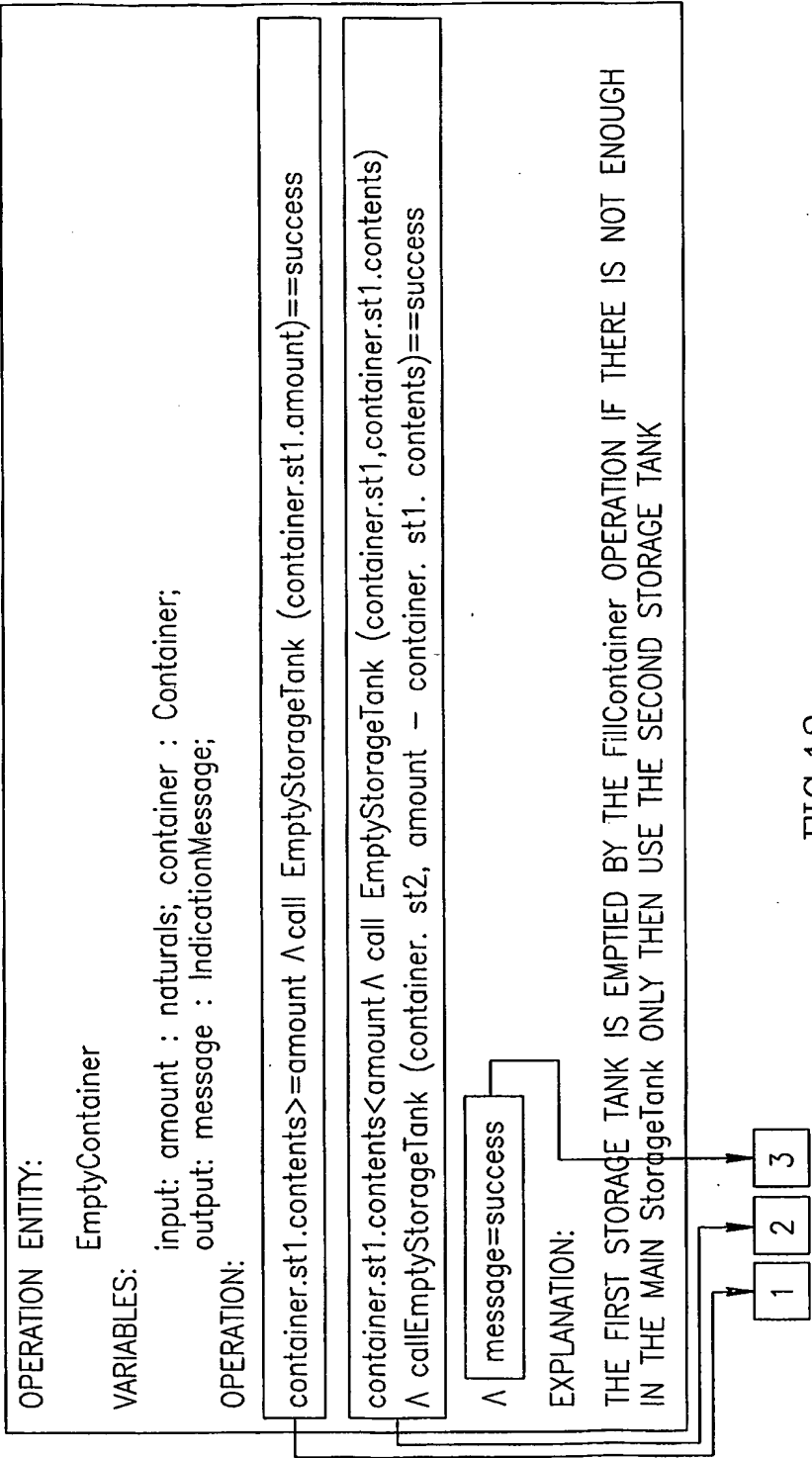


FIG.13

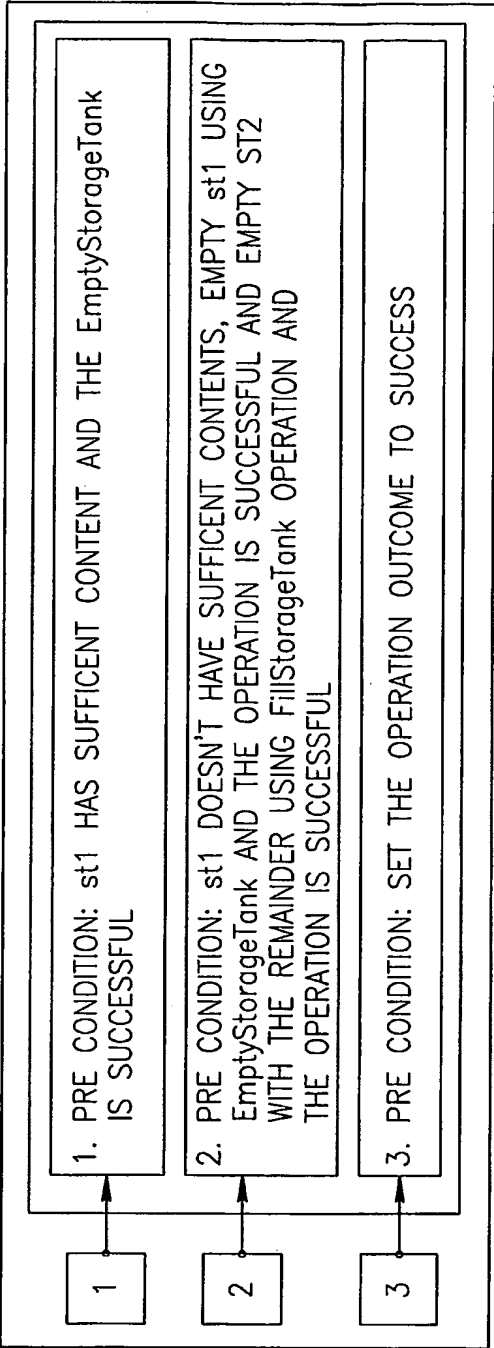


FIG.13A

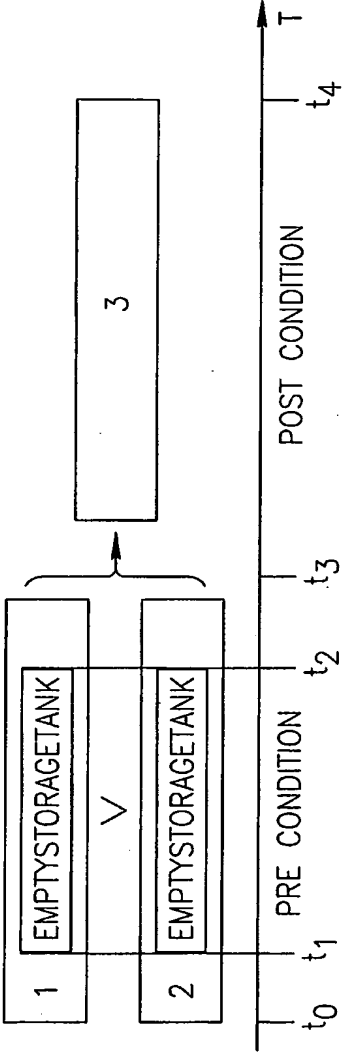


FIG.13B

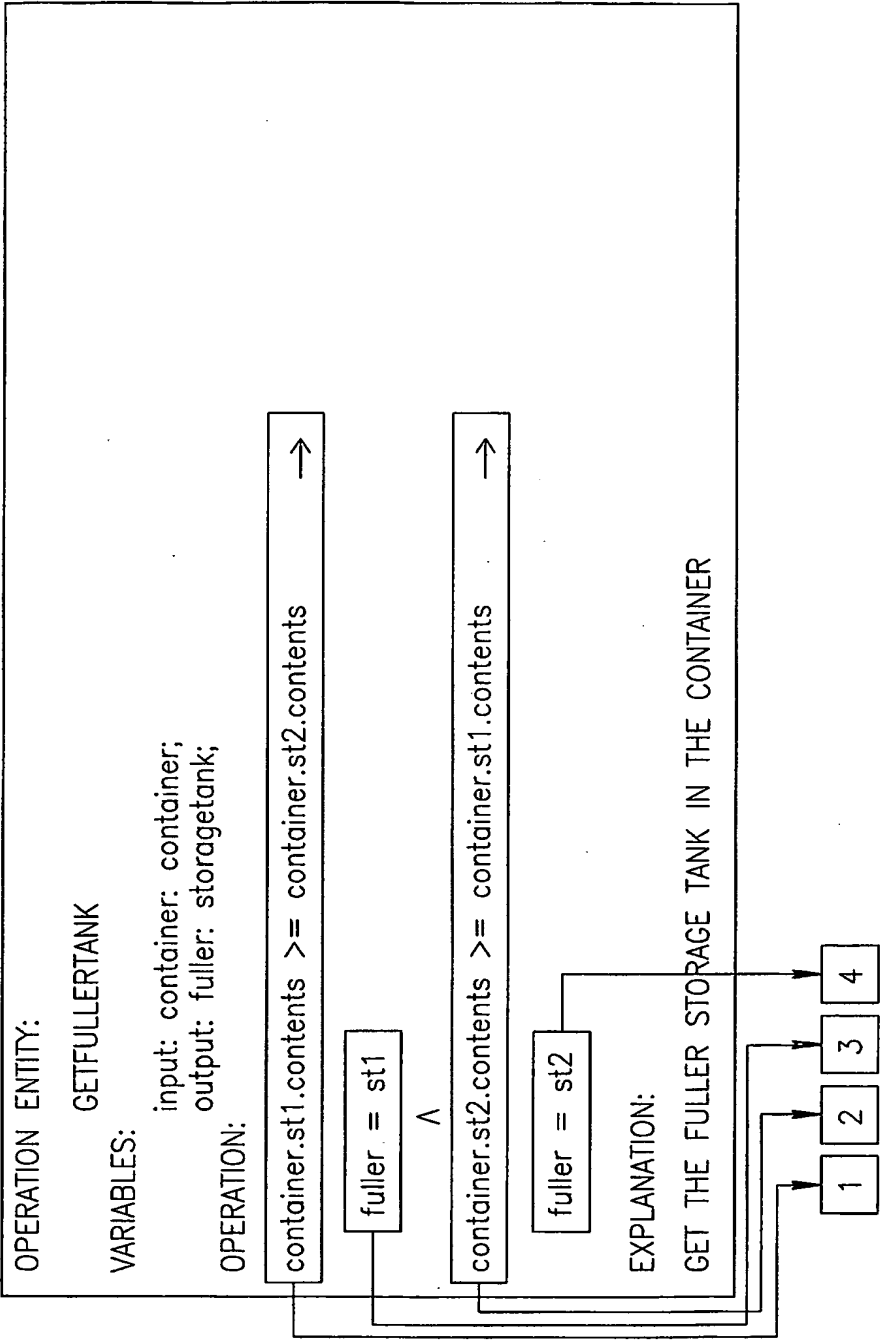


FIG.14

17/29

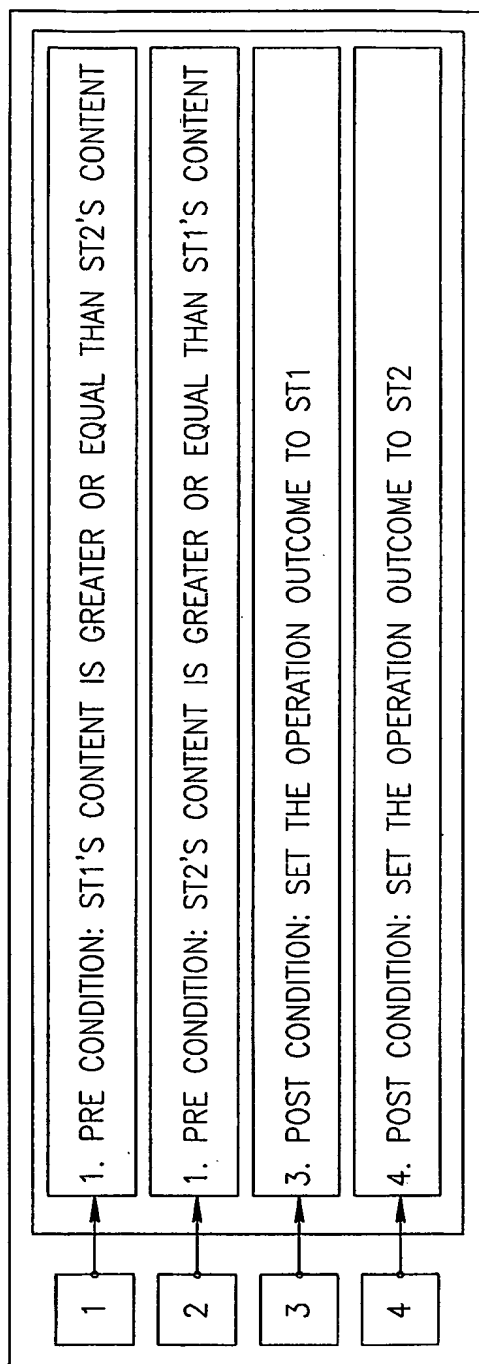


FIG.14A

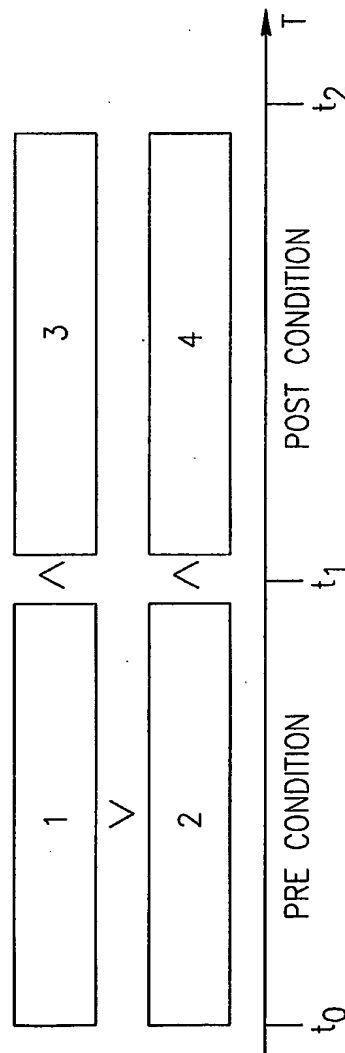


FIG.14B

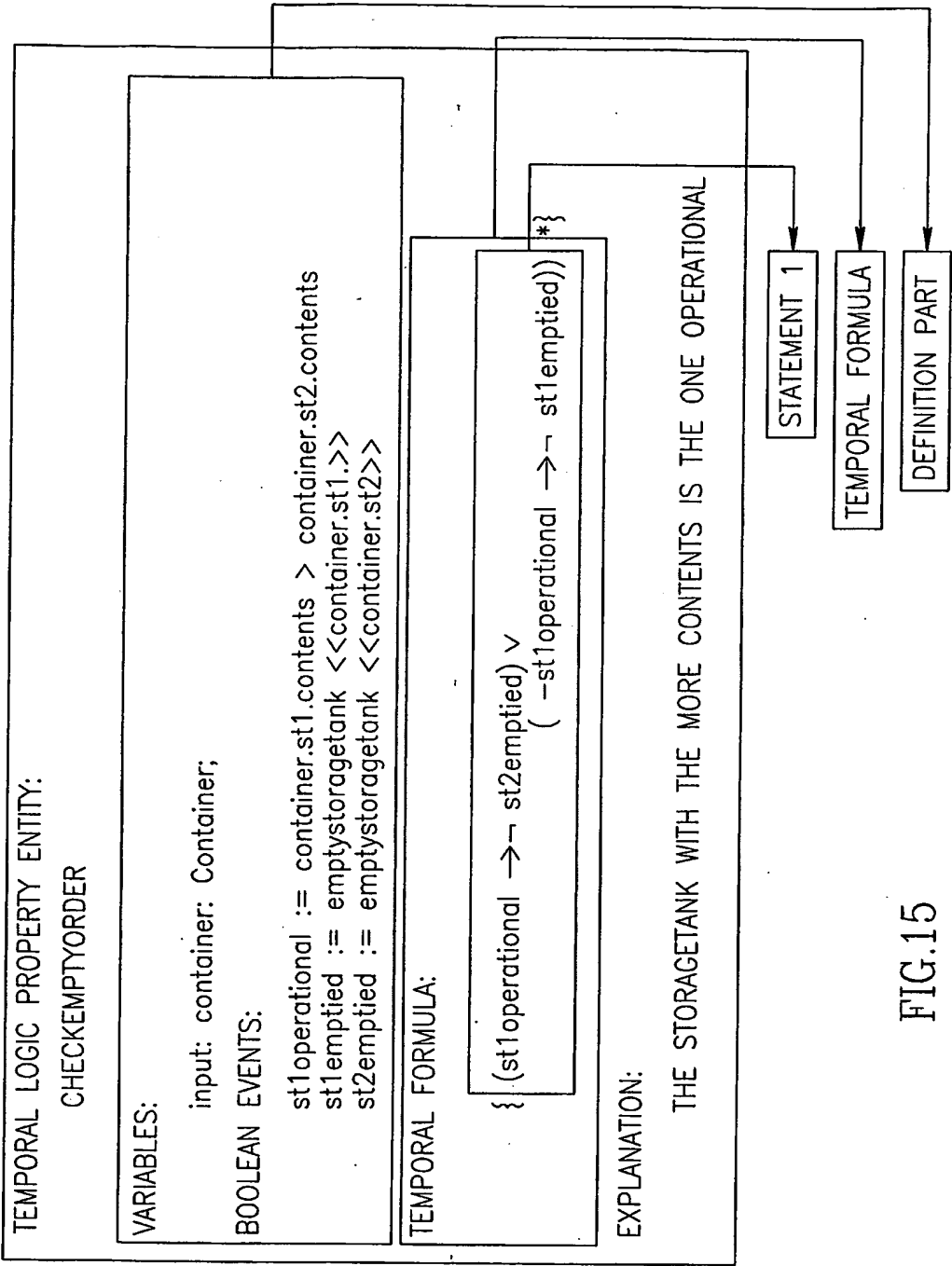


FIG.15

20/29

SCENARIO EXECUTION ENTITY:

test1

COMPONENT:

StorageContainer;

EXTERNAL VARIABLES:

SCENARIO:

call fillcontainer(storagecontainer.container, 100) ;

call fillcontainer(storagecontainer.container, 100) ;

call getfullertank();

FIG.16

21/29

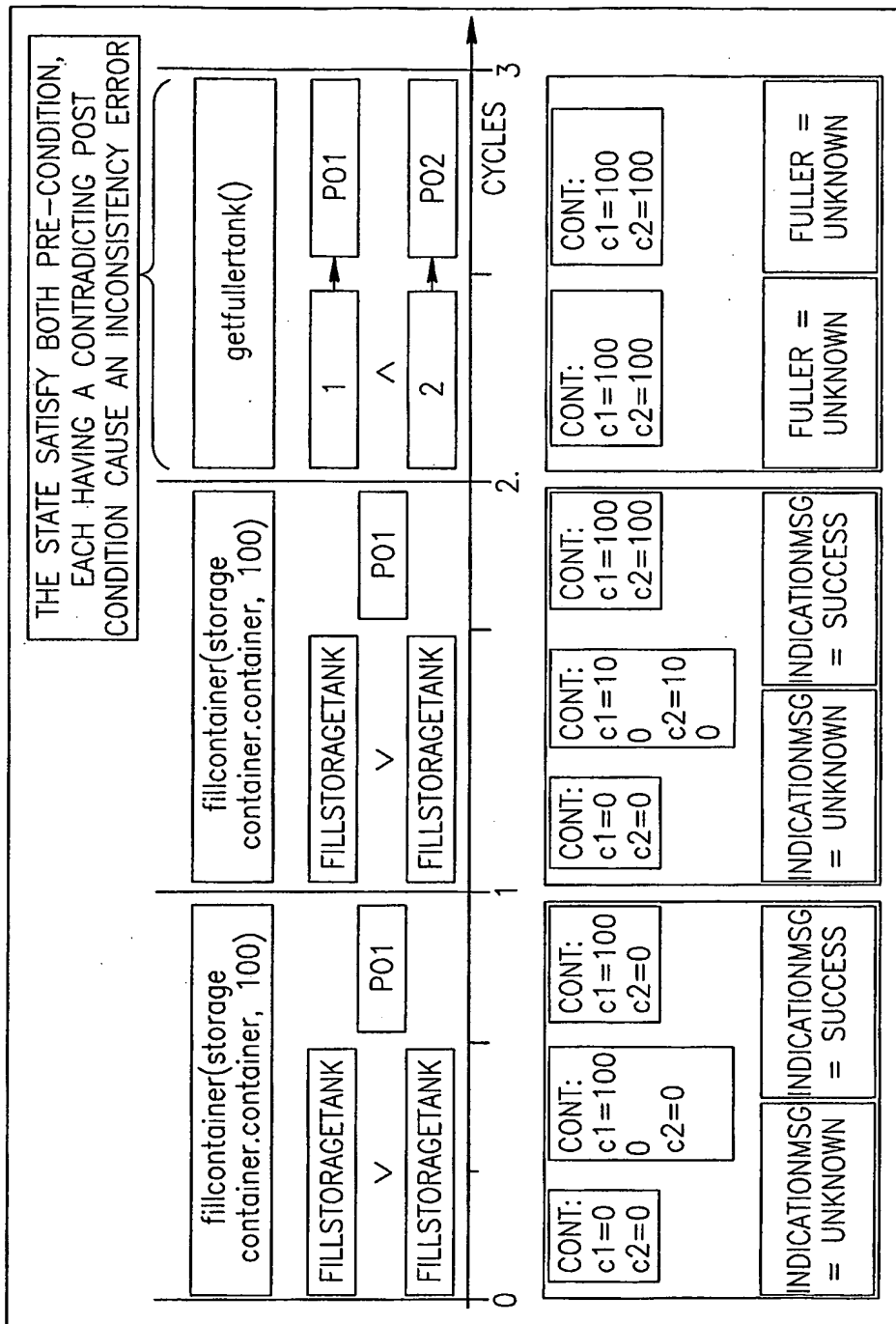


FIG.16A

22/29

SCENARIO EXECUTION ENTITY:

test2

COMPONENT:

storagecontainer;

EXTERNAL VARIABLES:

SCENARIO:

call fillcontainer(storagecontainer.container, 50) ;

call fillcontainer(storagecontainer.container, 50) ;

call fillcontainer(storagecontainer.container, 100) ;

call fillcontainer(storagecontainer.container, 100) ;

FIG.17

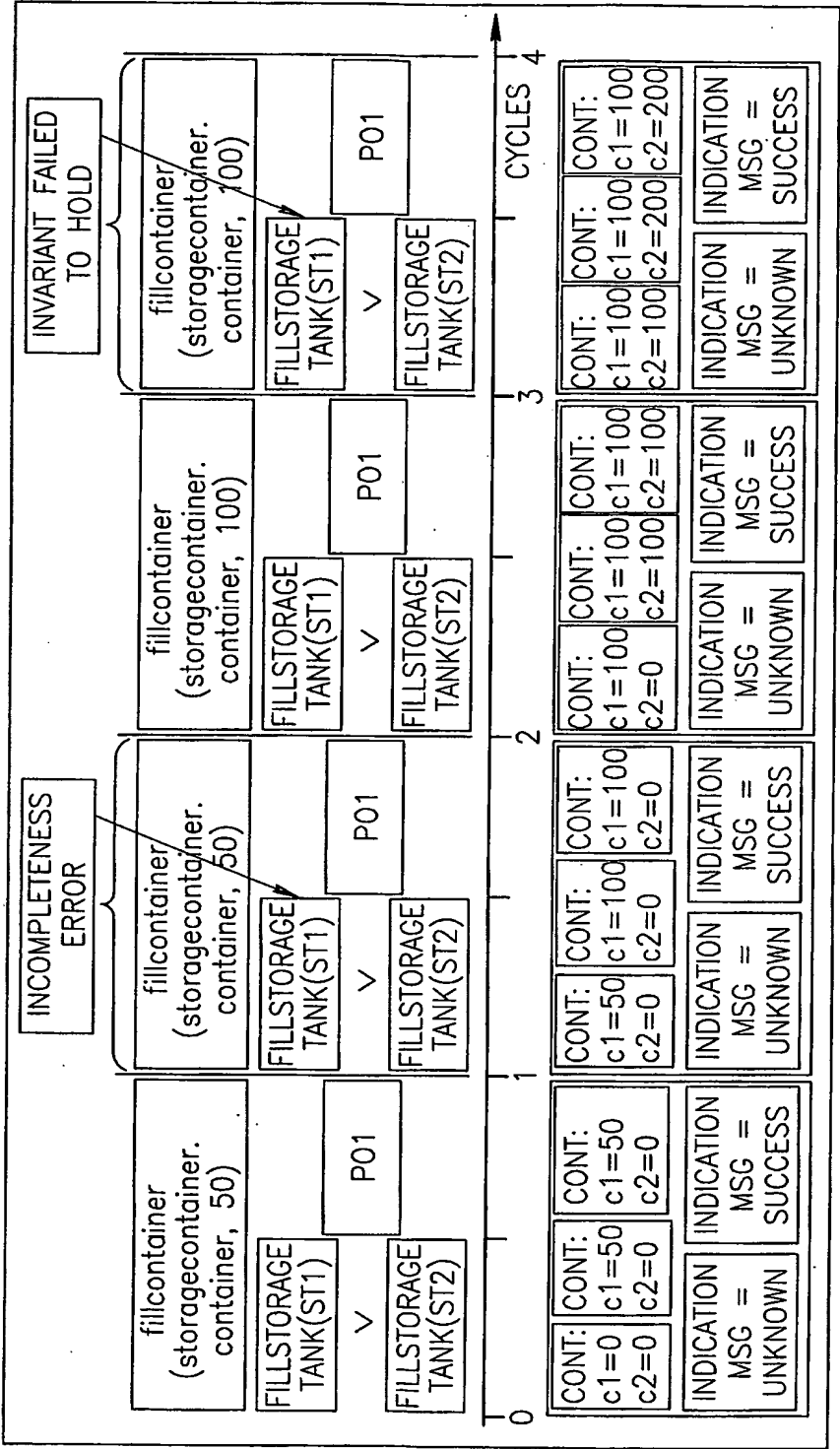


FIG.17A

24/29

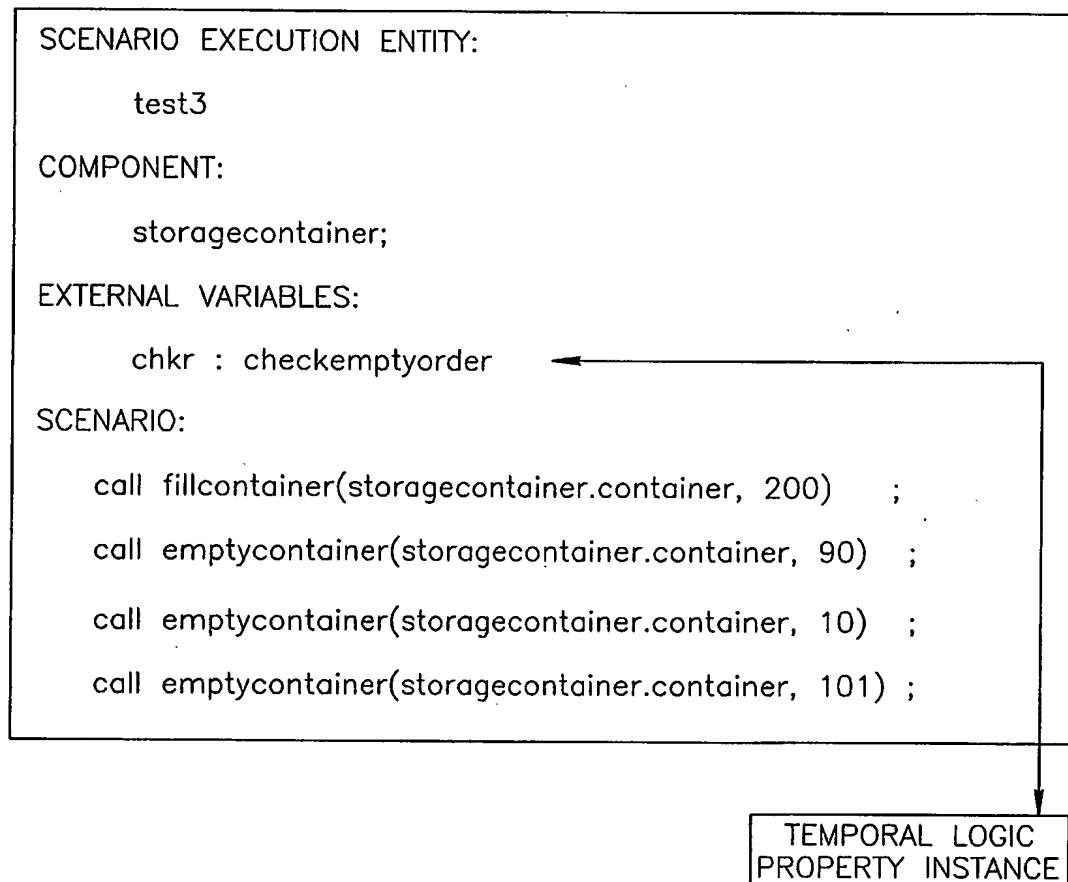


FIG.18

25/29

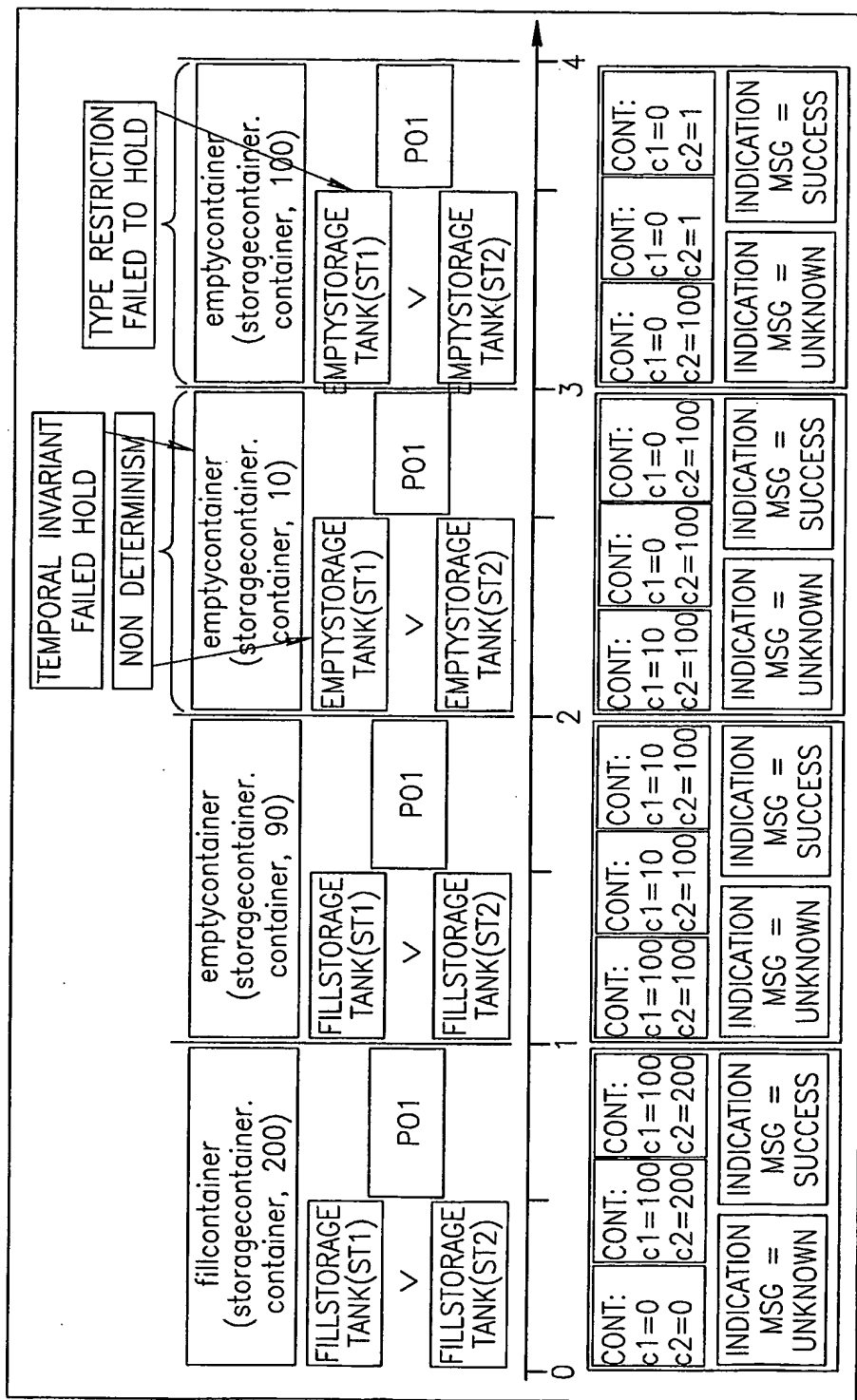


FIG.18A

26/29

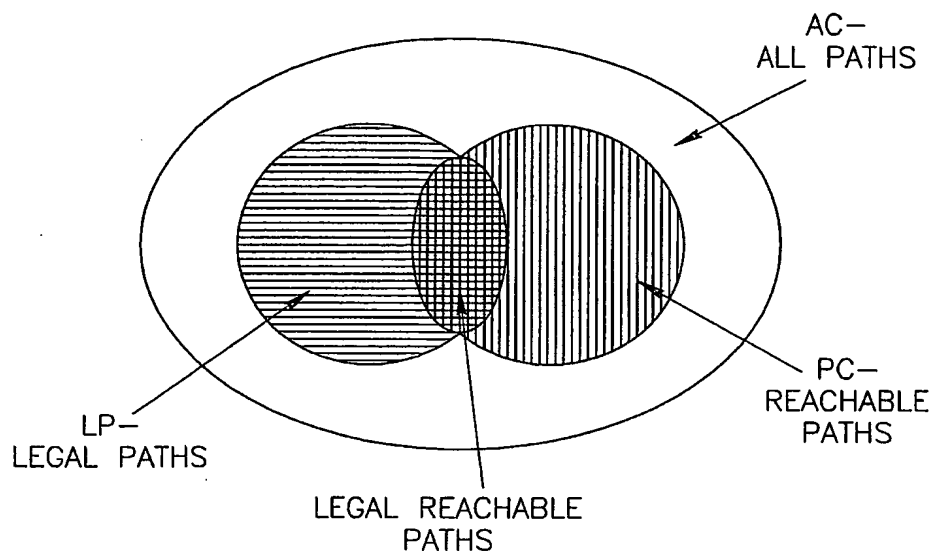


FIG.19

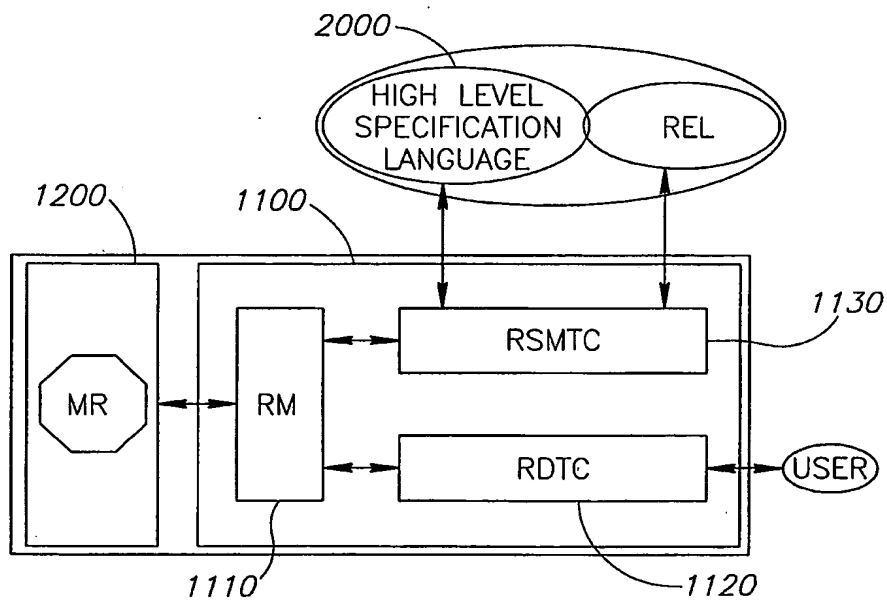


FIG.20

27/29

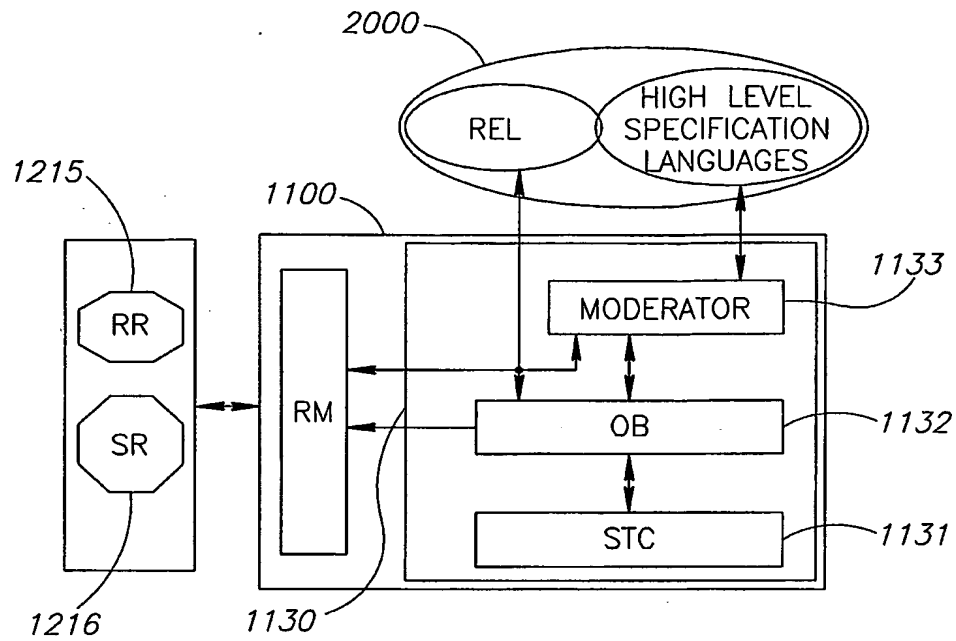


FIG. 21

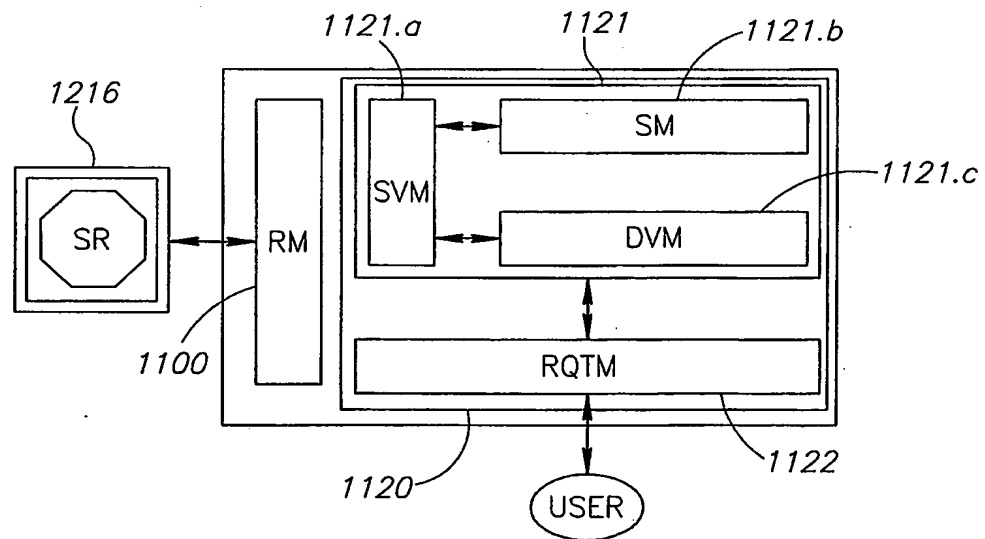


FIG. 22

28/29

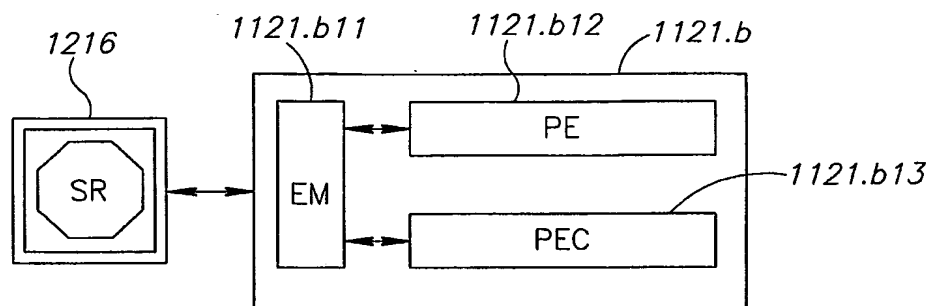


FIG. 23

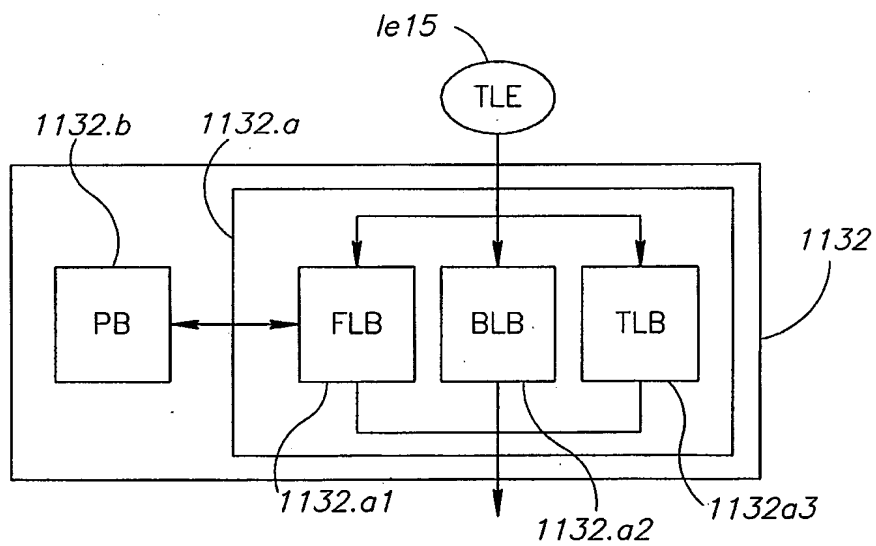


FIG. 24

29/29

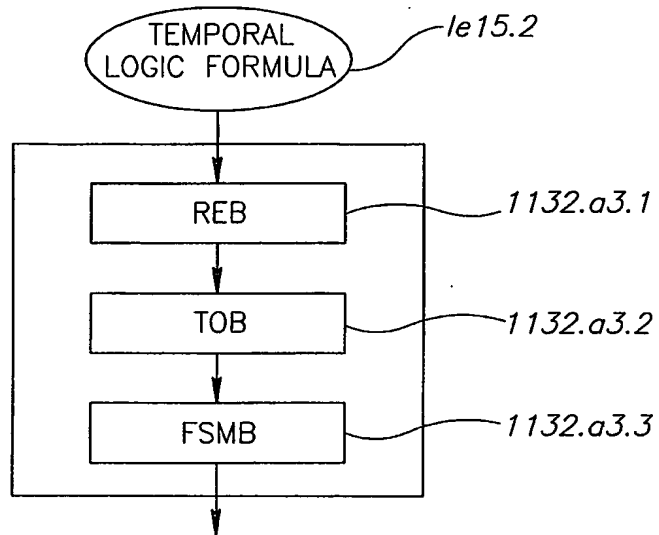


FIG. 25

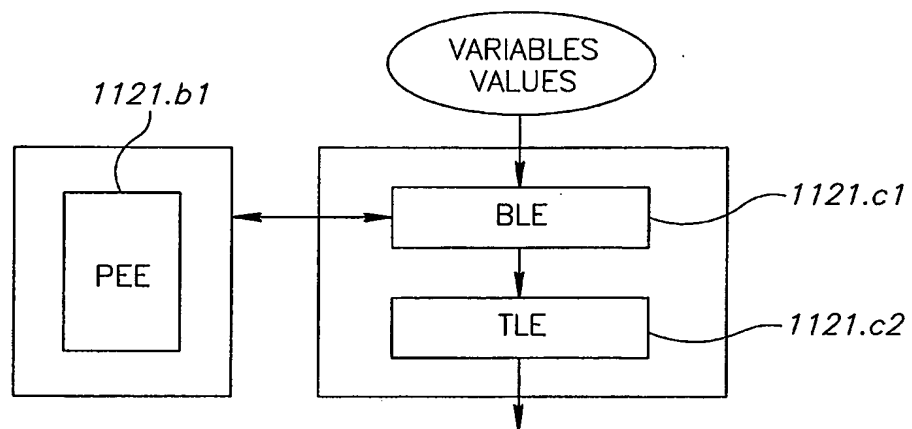


FIG. 26